syphilis, multiple trophic endocrine anomalies of the bones and viscera, Raynaud's angina of the extremities, and a mental picture resembling a dementia præcox.

Payr, E. STEINACH'S REJUVENATION OPERATION. [Zentralblatt für Chirurgie, September 11, 1920. J. A. M. A.]

To certain portions of genital glands Steinach applies the term "puberty gland," which corresponds to Leydig's cells—the interstitial cells of the testis—and to the interstitial substance of the ovary (lutein cells). Through experimentation we have learned that the endosecretory portions, the "puberty gland," are much more resistant to outside harm than are the generative portions of the genital glands. By the successful transplantation of the endosecretory portions from one individual to another, important facts in regard to the secondary sexual characters have been learned. Here we have, then, the basis for Steinach's procedure. By stimulation of the endosecretory action of the puberty gland at the expense of the generative function it is his idea to bring about a rejuvenating process in older people by the resuscitation and renewal of the weakening secondary sexual characters. In his latest communication Steinach describes two types of intervention: (1) ligation of the vas deferens where it merges with the epididymis, and (2) ligation of the ductuli efferentes (coni vasculosi) between the head of the epididymis and the upper pole of the testis. The latter leaves the blood vessels supplying the testis unimpaired. Payr remarks that, owing to gonorrhea or trauma adhesions are often present which render the second type of operation difficult. He gives what he would consider at present the contraindications for the Steinach operation: (1) well preserved power to produce spermatozoa; (2) need of special caution in excitable, depressed or mentally disturbed subjects; (3) enlargement of the prostate (prostatectomy, also a rejuvenating operation, being indicated instead); (4) other organic causes for premature old age, with marked changes in the heart, blood vessels, kidneys, pancreas, intestine, etc.; (5) occlusion of the vas deferens due to previous disease (gonorrhea), and (6) gradual deterioration of the secondary sexual characters owing to chronic disease of a different nature; for example, dystrophia adiposo-genitalis. Steinach's operation might be regarded as indicated in the case of subjects with healthy internal organs who are growing prematurely old and who, at the same time, show evidence of loss of function by their impaired secondary sexual characters. In doubtful cases röntgen irradiation should be tried before surgical operation is decided on. Only by such precautions can the threatening dangers, which Payr describes in detail, be avoided.